modulated signals based at least in part on the average channel current signal, one of the plurality of channel current signals, a reference signal and the error signal.

21. The method of claim 19, wherein the reference signal comprises a ramp signal.

22. A control circuit for a multi-phase DC/DC converter having an output voltage, the control circuit comprising:

an averaging circuit, responsive to a plurality of channel current signals representative of channel currents for a plurality of channel, that averages the values of the plurality of channel current signals to produce a signal representative of the average channel current;

an error amplifier, responsive to the output voltage and a reference signal, the error amplifier providing an error signal; and

a plurality of pulse width modulator circuits, each responsive to the error signal, the signal representative of the average channel current, one of the plurality of channel current signals, and a second reference signal to produce a plurality of pulse width modulated signals to control the plurality of channels of the multi-phase DC/DC converter.

Remarks

Claims 19-22 have been added, the currently pending claims are claims 1-22. Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2201.